

GLOSSARY

AA	assembly area
AABNCP	advanced airborne control platform
AAFIF	Automated Airfield Information File
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ABC	all-bituminous pavement
ABS	acrylonitrile-butadiene-styrene (plastic)
A/C	aircraft
AC	asphalt cement or asphaltic cement
ACC	asphalt-cement concrete
ACE	armored combat earthmover
ACN	aircraft classification number
ADEPT	alternating door exit procedures for training
adj	adjusted
ADR	air base damage repair
AF	Air Force
AFB	Air Force Base
AFCESA	Air Force Civil Engineering Support Agency
AFCS	Army Facilities Components System
AFESC	Air Force Engineering and Services Center
AFI	Air Force Instruction
AFM or AFMAN	Air Force manual
AFP or AFPAM	Air Force pamphlet
AFR	Air Force regulation

AFWL-TR	Air Force Weapons Laboratory Technical Report
agg	aggregate
AGL	above ground level
AH	attack helicopter
AHD	average haul distance
AI	airfield index
air base	An airfield having, in addition to operational facilities, shelter for personnel and facilities for supply and repair of aircraft.
airfield	An area prepared for the accommodation (including any buildings, installations, and equipment), landing, and takeoff of aircraft.
AM-2	aluminum matting
AMC	Air Mobility Command
AML	airfield marking and lighting
ammo	ammunition
ammunition and explosives storage area	An accessible and defiladed area having good cover; located at a safe distance from troops, aircraft, and other facilities; and used for storing explosives and ammunition.
ancillary items	Components of the mat system for use with the basic mat to construct the runway and taxiway complex, to replace damaged mat, or to remove mat for repair of the subgrade. The ancillary items are type-classified into a mat set to simplify requisitioning.
ANG	Air National Guard
angle, glide	A small vertical angle measured outward and upward from the end of the flight strip, above which no obstruction should extend within the area of the approach zone. It also indicates the safe descent angle for various types of aircraft and is expressed as a ratio such as 35:1.
antiskid coating	A compound applied to the top surface of a landing mat during fabrication to provide a skid-resistant surface, especially during inclement weather.
AP	antipersonnel
APC	armored personnel carrier

approach zone	A trapezoidal area extending outward from each end of a flight strip, within which no natural or man-made object may project above the glide angle.
apron, cargo	A prepared area for loading and unloading personnel and cargo.
apron, maintenance	A prepared area for parking aircraft while being serviced or repaired.
apron, parking	A prepared area used in place of hardstands for the parking of aircraft. It is also referred to as a conventional apron.
apron, warm-up	A stabilized or surfaced area used for the assembly or warming up of aircraft, usually located at both ends of the runway adjacent to and with the long axis parallel to the connecting taxiway.
approx	approximately
Apr	April
APSB	asphalt penetrative soil binder
AR	Army regulation
ARIA	advanced range instrumentation aircraft
ASCE	American Society of Civil Engineers
ASTM	American Society of Testing and Materials
ATC	air traffic control
atk	attack
Atterberg Limits	Soil plasticity test used to measure soil cohesiveness; that is, cohesive or cohesionless.
ATTN	attention
Aug	August
AUTOCAD	automated computer-aided drafting and design
av	absolute volume
average daily traffic (ADT)	The anticipated average number of vehicles per day that will use a completed facility.
average running speed	The speed expected to be maintained by most vehicles. It is equal to the total traveled distance divided by total time consumed.
avg	average
AVIM	aviation intermediate maintenance
avn	aviation

AWACS	Airborne Warning and Control System
AWADS	Adverse Weather Aerial Delivery System
AWS	Air Weather Service
banked cubic yardage (BCY)	Soil measured in its natural state.
base course or base	Base course consists of well-graded, granular materials that have a liquid limit less than 25 percent and a plastic limit less than 5 percent. The base course is the most important element in a road structure. It functions as the primary load-bearing component of the road, ultimately providing the pavement (or surface) strength. Therefore, it is made of higher quality material than subbase material.
bbl	barrel
bde	brigade
bearing capacity	The ability of a soil to support a vehicle without undue sinkage of the vehicle.
benching	Terracing on a slope.
berm	A raised lip, usually of earth, placed at the top edge of a channel to prevent flow into the channel at places not protected against erosion.
bitumen or bituminous	The most common type of asphalt surface placed in the theater of operations.
bn	battalion
BOM	bill of materials
borrow pit	An excavated area where material has been dug for use as fill at another location.
BTU	British thermal unit
BVM	Bays Village of Maryland
C, CL, or C/L	centerline
C	Celsius
C	cut
C	confidential
CAD	computer-aided design
cal	caliber

California Bearing Ratio (CBR)	A measure of the bearing capacity of a soil based upon its shearing resistance. CBR is expressed as a percentage of the unit load required to force a piston into the soil divided by the unit load required to force the same piston the same depth into a standard sample of crushed stone. See Chapter 5, FM 5-430-00-1/AFJPAM 32-8013, Vol 1, or FM 5-541.
CAMMS	Condensed Army Mobility Modeling System
CAPES	Controlled Alternate Parachute Exit System
CARP	computed air release point
cav	cavalry
CBA	close battle area
cbt	combat
C/C	center to center
CCT	combat control team
cdr	commander
CDS	container delivery system
CE 55	Laboratory compactive effort (CE) accomplished by the impact of 55 hammer blows per layer.
CES	civil engineering squadron
CEV	combat engineer vehicle
cf	cubic feet
cfs	cubic feet per second
CG	center of gravity
CH	inorganic clays of high plasticity, fat clays
CH	cargo helicopter
CI	cone index
CL	clays, low compressibility (LL<50)
clear area	A rectangular area located adjacent to and outside of the runway shoulders, in which tree stumps are cut close to the ground, boulders removed, and the general area roughly graded to the extent necessary to reduce damage to aircraft in the event of erratic performance in which the aircraft runs off the runway.

cm	centimeter
cmd	command
CMP	corrugated metal pipe
cm/sec	centimeters per second
co	company
coarse-grained soil	A free-draining soil of which more than 50 percent by weight of the grains will be retained on a No. 200 sieve. For trafficability purposes, these are dry beach and desert soils usually containing less than 7 percent of material passing the No. 200 sieve. Gravels are not considered to pose a trafficability problem.
comm	communications
COMMZ	communications zone
comp	compacted
compacted cubic yards (CCY)	A measurement of compacted soil.
compaction	Process of mechanically densifying a soil, normally by the application of a moving (or dynamic) load.
compactive effort (CE)	Method used to compact the soil.
cone index [CI]	An index of the shearing resistance of soil. The CI is obtained with a cone penetrometer. The number represents resistance to penetration into the soil of the 30-degree cone with a 1/2-square-inch base area (actual load in pounds on cone base area in square inches), using a dial calibrated to produce an index of 300 when 150 lb of pressure are exerted on the handle. The CI reading is normally taken at the 0-inch (base of the cone) and at every 3-inch interval down to 18 inches or until the dial reaches the maximum of 300. A number of tests will be taken and each specified interval reading will be averaged. That average becomes the CI for the inch level.
const	construction
cont	continue
control tower	Usually a covered and enclosed platform for the direction and control of traffic. Depending upon the type of construction authorized, the control tower may be a mobile unit or a self-supported structure, no higher than necessary to afford an unobstructed view of the entire flight path and taxiways.
CONUS	continental United States
CPM	critical path method

CPT	captain
critical layer	The soil layer that determines the rating cone index (for fine-grained soil) or cone index (for coarse-grained soil) of the area considered. Its depth varies with the soil profile and the weight and type of vehicle. Generally, the critical layer for fine-grained soils is 6 to 12 inches below the surface when subjected to passes of a vehicle. For coarse-grained soils, the critical layer is usually from the surface to a 6-inch depth for all vehicular passes.
crown	(1) The difference in elevation between the centerline and the surface edge. The crown expedites surface-water runoff on the road. The amount of crown depends on the surface used. Surfaces such as concrete or bituminous materials require little crown because of their impermeability, but permeable surfaces such as earth or gravel require a large crown. (2) The outside top of the culvert.
CRS	Central Radar System
CSS	cationic slow setting
cu cm	cubic centimeter
CUCV	commercial utility cargo vehicle
cu ft	cubic foot/feet
culvert	An enclosed waterway used to pass water through a structure consisting of an embankment or fill.
cut or cutting	That portion of through construction produced by the removal of the natural formation of earth or rock, whether sloped or level. The terms <i>sidehill cut</i> and <i>through-hill cut</i> describe the resulting cross sections commonly encountered.
cut slope	The slope from the top of a cut to the ditch line (bottom of ditch). Sometimes it is called the back slope.
cu yd or cy	cubic yard(s)
D	depth
DA	Department of the Army
DBH	diameter at breast height
DCA	dust-control agent
DCP	dynamic cone penetrometer
DD	Department of Defense
Dec	December

deg	degree(s)
dept	department
design hourly volume (DHV)	The number of vehicles that a road may typically be expected to accommodate in an hour. The DHV is 15 percent of the ADT.
design speed	The speed for which a facility is designed. Pertinent geometric features, such as horizontal curves and grades, may be based on design speed.
design storm	The storm of greatest intensity for a given period. For example, a <i>2-year design storm</i> is a storm expected to be equalled once in 2 years.
detention	The storage of water in depressions in the earth's surface.
DF	direction finder
dH	pressure altitude
dia	diameter
dip	A paved ford used for crossing dry, wide, shallow arroyos or washes in semi-arid regions subject to flash floods.
ditch slope	The slope of the ditch extending from the outside edge of the shoulder to the bottom of the ditch. This slope should be relatively flat to avoid damage to vehicles driven into the ditch and to permit easy recovery.
diversion ditch	A ditch used to transport water away from roadways or airfields.
DMA	Defense Mapping Agency
DMZ	demilitarized zone
DOD	Department of Defense
drop	A structure that absorbs the impact energy of water as it falls vertically to a lower level waterway.
DSA	division support area
DSN	Defense Switched Network
DT	ditch time
DZ	drop zone
DZC	drop zone control
E	east

ea	each
earth anchors	A device used along the sides and ends of the matting to hold the mat in position. Power equipment can be used in driving the anchors. The pneumatic wood-boring drill and posthole digger have both proven effective in this. The average pull required to remove anchors after emplacement is 2,040 pounds.
EL or elev	elevation
EM	engineer manual
EM	enlisted member
ENE	east northeast
engr	engineer
EOD	explosive ordnance disposal
EPW	enemy prisoner of war
erosion	The transportation of weathered materials by wind or water.
ESE	east southeast
ETAC	Environmental Technical Applications Center
EW	east-west
EZ	extraction zone
EZC	extraction zone control
F	fill
F	Fahrenheit
FAA	Federal Aviation Authority
FC	field circular
Feb	February
fill or filling	Material used to fill a receptacle, cavity, passage, or low place. Using material to fill a cavity or low place.
fill slope	The incline extending from the outside edge of the shoulder to the toe (bottom) of a fill.
fine-grained soil	A silt or clay soil of which more than 50 percent by weight of the grains will pass a No. 200 sieve (smaller than 0.074 millimeter in diameter).

firing-in-butt	A U-shaped revetment, normally of earth, and hardstand for boresighting aircraft armament and test firing.
fld	field
flight path	The line connecting successive positions occupied by an aircraft, missile, or space vehicle as it moves through air or space.
flight strip	Includes area of the runway, shoulders, clear area, overruns, and clear zones.
FM	field manual
ford	A shallow place in a waterway where the bottom permits the passage of personnel and vehicles.
fpm	foot (feet) per minute
fps	foot (feet) per second
frost action	Processes which affect the ability of soil to support a structure when accumulated water in the form of ice lenses in the soil is subjected to natural freezing conditions.
frost-susceptible soil	Soil in which significant ice segregation will occur when the necessary moisture and freezing conditions are present.
FSN	federal stock number
ft	foot/feet
FT	Fort
ft/ft	feet per foot
ft/in	feet per inch
FTR	fighter
ft²/yd²	square feet per square yard
fuel storage area	An accessible area, having good cover, located a safe distance from troops, aircraft, and other facilities, and used for the storage and dispensing of aviation fuels.
G	gravel
G-1	Assistant Chief of Staff, G-1 (Personnel)
gabion	Large, steel wire-mesh baskets filled with stones, usually rectangular in shape and variable in size. They are designed to solve the problem of erosion.

gal	gallon(s)
gal/lb	gallon(s) per pound
gal/yd²	gallon(s) per square yard
GC	clayey gravels, gravel-sand-clay mixture
GCA	ground-controlled approach
geometric design (geometry or geometric features)	Refers to all visible features of the road such as lane width, shoulder width, and alignment.
GLE	grade-line elevation
gm	gram(s)
GM	silty gravels, gravel-sand-silt mixture
GMRS	Ground Mark Release System
GP	poorly graded gravels or gravel-sand mixture, little or no fines
grade	To level off to a smooth horizontal or sloping surface.
ground icing	An icing whose source of water is from groundwater flow above permafrost.
groundwater table	The upper limit of the saturated zone of free water.
Gunite	A mixture of cement, sand, and water sprayed from a high-pressure nozzle onto a surface to protect it.
GW	well-graded gravels, gravel-sand mixture, little or no fines
H	height
HAARS	High-Altitude Airdrop Resupply System
hardstand	A paved or stabilized area where vehicles are parked. Open ground area having a prepared surface and used for the storage of material.
hel	helicopter
HM	heavy mat
HMMWV	high mobility, multipurpose wheeled vehicle
HP	high point
HQ	headquarters

HQDA	Headquarters, Department of the Army
HSLADS	High-Speed, Low-Level Airdrop System
HVCDS	High-Velocity Container Delivery System
HW	high water
hydraulic gradient	The slope in feet per foot of a drainage structure.
hydrologic cycle	The continuous process in which water is transported from the oceans to the atmosphere to the land and back to the sea.
Hz	hertz
I	initial
LAW	in accordance with
icing	An irregular sheet or field of ice.
IFR	instrument flight rules
ILAS	Instrument Landing Approach System
IL	Illinois
IMC	instrument meteorological conditions
in	inch(es)
infiltration	The absorption of rainwater by the ground on which it falls.
in/hr	inches per hour
INS	Inertial Navigation System
in situ	Soil in its natural (undisturbed) state.
interception	The holding of rainfall in the leaf canopy of trees and plants.
IR	infrared
Jan	January
JCS PUB or Joint Pub	Joint Chiefs of Staff publication
Jul	July
Jun	June
kg	kilogram(s)

kip	kilopound (1,000 pounds)
km	kilometer(s)
kph	kilometers per hour
<b(kv< b=""></b(kv<>	kilovolt(s)
KVA	kilo-volt-amp(s)
kw	kilowatt(s)
L	length
laminar flow	The type of flow that occurs when viscosity forces predominate and the particles of the fluid move in smooth, parallel paths.
landing field	A very general term designating an area of land prepared for the takeoff and landing of aircraft.
landing mat	A prefabricated, portable mat so designed that any number of planks (sections) may be rapidly fastened together to form surfacing for emergency runways, landing beaches, and so forth.
LAPES	Low-Altitude Parachute Extraction System
lat	latitude
lateral safety zone	An area (transitional surface) located between the runway clear area or runway edge when no clear area is provided and the clearance lines limiting the placement of building construction and other obstacles with respect to the runway centerline. The slope of the transitional surface is 7:1 outward and upward at right angles to the runway centerline.
lb	pound(s)
ldg	loading
lin ft	linear foot/feet
LIP	length in place
liq	liquid
LL	liquid limit
LM	light mat
LOC	lines of communication
LP	low point

LZ	landing zone
m	meter(s)
M	silt
MAC	Military Airlift Command
MACOM	major Army command
maint	maintenance
MAJCOM	major command
Mar	March
mass diagram	Earthwork volume plotted on graph paper, showing cut and fill operations.
mat'l	material
max	maximum
maximum towing force (T1)	The maximum continuous towing force in pounds a vehicle can exert. It is expressed as a ratio or percentage of vehicle weight.
MCPB	Mapping and Charting Program Branch
MD	Maryland
mental hazard	An object, real or imaginary, not within the specified glide angles and clearance lines, but in the vicinity of the airfield, which constitutes in the mind of the pilot a hazard to the safe operation of aircraft in landing or taking off.
met	meteorological
MH	inorganic silts, micaceous or diatomaceous fine sandy or wilty soils, elastic silts
mi	mile(s)
mil	military
MIL-STD	military standard
min	minimum
min	minute
ML	inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity

mm	millimeter(s)
MM	medium mat
mo	month
MO	maximum offset
MO	Missouri
mobility index (MI)	A number that results from a consideration of certain vehicle characteristics.
MOPP	mission-oriented protective posture
MOS	military occupational specialty
mph	mile(s) per hour
MS	medium setting
MSR	main supply route
MTOE	modified table of organization and equipment
N	Slipperiness symbol meaning not slippery under any conditions.
N	north
NA or N/A	not applicable
NATO	North Atlantic Treaty Organization
NAVAID	navigational aid
NBC	nuclear, biological, chemical
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NE	northeast
NEACP	National Emergency Airborne Command Post
NFS	nonfrost-susceptible
NGR	National Guard regulation
NM	nautical mile(s)
NNE	north northeast

NNW	north northwest
no.	number
NOAA	National Oceanic and Atmospheric Administration
Nov	November
NP	number of pipes
NRMM	NATO Reference Mobility Model
NRS	naval radio station
NS	north-south
NSN	national stock number
NVG	night-vision goggles
NW	northwest
O	offset
Oct	October
OD	outside diameter
OH	observation helicopter
OL	order length
ONC	operational navigation chart
opns	operations
overrun	A graded and compacted portion of the clear zone, located at the extension of each end of the runway, to minimize risk of accident to aircraft due to overrun on takeoff or undershooting on landing. Its length is normally equal to that of the clear zone and its width is equal to that of the runway and shoulders.
P	Slipperiness symbol meaning slippery when wet.
PAPI	precision approach path indicator
para	paragraph
PBS	prefabricated bituminous surfacing
PC	Portland cement
PC	point of curvature

pcf	pounds per cubic foot
pci	pounds per cubic inch
PCN	pavement classification number
PECS	prepackaged expendable contingency supply
perm	permanent
permafrost	Constantly frozen ground.
PFS	partially frost-susceptible
PI	plasticity index
PI	point of intersection
pkg	parking
PL	plastic limit
PO	post office
POI	point of impact
POL	petroleum, oils, and lubricants
ponding	The accumulation of water at the upstream end of a culvert.
pop	population
Pr	probability
PRF	penetration resistance factor
Prime BEEF	prime base engineer emergency forces
psf	pounds)per square foot
psi	pounds per square inch
PSP	pierced steel plank
PT	point of tangency
PVC	point of vertical curvature
PVC	polyvinyl chloride
PVI	point of vertical intersection
PVT	point of vertical tangency

QSTAG	Quadripartite Standardization Agreement
qtrs	quarters
RACON	radar beacon
RAM	raised angle marker
rating cone index (RCI)	The measured cone index multiplied by the remolding index ($RCI = CI \times RI$). The RCI expresses the soil-strength rating of a soil area subjected to sustained traffic.
RC	rapid curing
RCL	recognition control light
REDCOM	Readiness Command
RED HORSE	rapid engineering deployable heavy operational repair squadrons, engineering
reg	regulation
remoldable sand	A poorly drained, coarse-grained soil, usually containing 7 percent or more material passing a No. 200 sieve. Poor internal drainage increases the water content greatly influencing the trafficability characteristics and permitting the remolding test to be performed. When wet, these soils react to traffic in a manner similar to fine-grained soils and are more sensitive to remolding.
remolding	The changing or working of a soil by traffic or a remolding test. The beneficial, neutral, or detrimental effects of remolding may change soil strength.
remolding index (RI)	The ratio of remolded soil strength to original strength. Soil conditions that permit the remolding test to be performed with ease will usually result in a loss of strength.
req'd or reqd	required
required towing force (T2)	The force in pounds required to tow an operable, powered vehicle on level terrain.
revetment	Usually a mound or wall of earth, masonry, timber, sandbags, or other suitable material erected as a protection for aircraft against small arms or artillery fire, bomb splinters, or blast.
RI	remolding index
riprap	Rocks or rubble placed in the bottom and on the sides of a ditch to prevent soil erosions.

river icing	An icing formed along rivers or streams and adjacent areas having a source of water above or below the riverbed.
RL	real length
road, access	A two-way road, normally improved, connecting the air base or airfield with the existing road system of the vicinity.
roadbed	The entire width of surface on which a vehicle may stand or move. The roadbed consists of both the traveled way and the shoulders.
road classification system	An organized list of four road types based on the number of vehicles each is designed to accommodate in a 24-hour period. Road characteristics are based on average daily traffic.
road, service	A road connecting the access road and the bomb and fuel storage areas with all hardstands and aprons for the purpose of refueling, rearming, and servicing aircraft.
roadway	The entire width within the limits of earthwork construction and is measured between the outside edges of cut or fill slopes. Roadway width does not include interceptor ditches if they fall outside the slopes. The roadway width varies from section to section depending on the height of cut or fill, depth of ditches, and slope ratios.
row	A strip of landing mat equal to one panel length and extending longitudinally (parallel to the direction of traffic) for the entire length of the runway or taxiway.
R/R	recoilless rifle
RR	railroad
RRR	rapid runway repair
RS	rapid setting
RT	road tar
RT	right
RTCB	road-tar cutback
RTO	radiotelephone operator
run	A strip of mat equal to one panel width and extending transversely (perpendicular to the direction of traffic) across the entire width of the runway, taxiway, or roadway.
runway	A defined rectangular area of an airfield, prepared for the landing and takeoff run of aircraft along its length.

RW	real width
R/W	runway
S	south
S	Slipperiness symbol meaning slippery at all times.
S	sand
S2	Intelligence Officer (US Army)
S3	Operations and Training Officer (US Army)
SAAF	small austere airfield
sand grid	A honeycomb shaped geotextile measuring 20 feet by 8 feet by 8 inches deep when fully expanded. It is used to develop a beachhead for logistics-over-the-shore operations. It is also useful in expedient revetment construction.
SC	clayey sands, sand-clay mixture
SC	supply catalog
SC	slow curing
SCIP	scarify and compact in place
SE	southeast
SEATO	Southeast Asia Treaty Organization
sec	second
Sept	September
SF	standard form
SFC	sergeant first class
shoulder	(1) That part of the top surface of an approach embankment, causeway, or cut immediately adjoining the roadway that accommodates stopped vehicles in emergencies and laterally supports base and surface courses. (2) A graded and compacted area on either side of the runway to minimize the risk of accident to aircraft running off or landing off the runway.
shoulder slopes	These may be the same as the traveled way, but usually they are greater because shoulders are more pervious than the surface course.

sight distance restriction factor	The percent of the total length of the road on which the sight distance is less than 1,500 feet.
SKE	station keeping equipment
slipperiness	The low traction capacity of a thin soil surface owing to its lubrication by water or mud without the occurrence of significant vehicle sinkage.
slope	The inclined surface of an excavated cut or an embankment.
slope ratio	The relative steepness of the slope expressed as a ratio of horizontal distance to vertical distance. Thus, a 2:1 slope ratio signifies that for every 2 feet horizontally there is a rise or fall of 1 foot. The value of the slope ratio used in construction depends on the properties of the soil and the vertical height of the slope. Ditch slopes may also be governed by the amount of water to be drained and the possibility of erosion.
SM	silty sands and poorly graded sand-silt mixture
SOCOM	special operations command
SOF	special operations forces
SOLL	special operations low-level
SOP	standing operating procedure
SP	poorly graded sands or gravelly sands, little or no fines
spring icing	An icing whose source of water is from subpermanent levels.
sq	square
sqdn	squadron
sq ft	square foot/ feet
sq in	square inch(es)
sq yd	square yard(s)
Sr	senior
SS	slow setting
SSE	south southeast
SSG	staff sergeant
SSW	south southwest

sta	station
STANAG	Standardization Agreement
stickiness	The ability of a soil to adhere to the vehicle undercarriage or running gear.
stilling basin	A structure used to protect the culvert outlet against erosion.
STOL	short takeoff and landing
subbase or subgrade	Describes the in situ soil on which a road, airfield, or heliport is built. The subgrade includes soil to the depth that may affect the structural design of the project or the depth at which climate affects the soil.
subsurface water	Water beneath the surface of the land.
sum	summation
superelevation	The transverse downward slope from the outside to the inside of the traveled way on a curve. It is usually expressed in inches of drop per horizontal foot or foot-drop per horizontal foot.
surface course	The surface course provides a smooth, hard surface on which the traffic moves. It may be constructed from asphalt or tar products, concrete, gravel, or compacted earth with certain types of binders. The surface course should be all-weather and should provide for the rapid runoff of water. The use of treated surfaces is limited to roads that have a long design life. A divisional road with a life expectancy of 6 months or less will receive only an earth or gravel surface.
surveil	surveillance
SUSV	small-unit support vehicle
SW	well-graded sands, gravelly sands, little or no fines
SW	southwest
T	thickness
T	temporary
T1	maximum towing force
T2	required towing force
TA	Theater Army
TACAN	tactical air navigation

takeoff ground run (TGR)	The distance traveled by an aircraft along the runway before becoming airborne.
taxiway (txy)	A specially prepared or designated path on an airfield for the use of taxiway aircraft.
TBM	temporary bench mark
TC	training circular
TDF	total depth of fill
temp	temperature
TH	thickness x height
thd	thread
time of concentration (TOC)	The time it takes for an entire drainage basin to begin contributing runoff to a drainage structure.
TM	technical manual
TN	air transport
TNT	trinitrotoluene
TO	theater of operations
TOE	table(s) of organization and equipment
touchdown area	That portion of the beginning of the runway normally used by aircraft for primary contact of wheels on landing.
TP	transition point
traction capacity	The ability of soil to resist the vehicle tread thrust required for steering and propulsion.
traffic lane	The traffic lane consists of the road surface over which a single lane of traffic will pass.
trans	transportation
transpiration	The process by which water that has traveled from the ground through the plant's system is returned to the air through the leaf system.
traveled way	The road surface upon which all vehicles move or travel. For a single-lane road, the traveled way is the same as one traffic lane. For a multilane road, the traveled way is the sum of the traffic lanes. If a surface course is provided, it normally extends only across the traveled way.

trk	truck
turbulent flow	The type of flow that occurs when viscosity forces are relatively weak and the individual water particles move in random patterns within the aggregate forward-flow pattern.
TYP	typical
U	unsurfaced soil with or without mat
UAV	unmanned aerial vehicle
UH	utility helicopter
UHF	ultrahigh frequency
UHFDF	ultrahigh frequency direction finder
US	United States
USAASO	United States Army Aeronautical Services Office
USAE	United States Army Engineer
USAES	United States Army Engineer School
USAF	United States Air Force
USCS	Unified Soil Classification System
util	utility
UXO	unexploded ordnance
V	volt
VA	Virginia
VASI	visual approach slope indicator
VC	vitricified clay
vehicle cone index (VCI)	The index assigned to a given vehicle that indicates the minimum soil strength in terms of rating cone index (or cone index for coarse-grained soil) required for one pass (VCI_1) or other passes (VCI_n) of the vehicle. Usually one and fifty passes are used as extremes.
VFR	visual flight rules
VGSI	Visual Glide Scope Indicating System
vis	visibility

VMC	visual meteorological conditions
vol	volume
VTOL	vertical takeoff/landing
W	west
W	width
W1	weight of a towing vehicle
W2	weight of a towed vehicle
w/	with
w/o	without
WES	Waterways Experiment Station
WF	waste factor
wg	wing
wind sock	A long fabric cone open at both ends, used to indicate the wind direction to an airborne pilot.
wind tee	A T-shaped device for indicating landing direction to pilots.
WNW	west northwest
wp	wetted perimeter
W.R.C.	wire rope cable
WSW	west southwest
wt	weight
WT	weight type
yd	yard(s)
yr	year
ZM	zone marker
<	less than
≤	less than or equal to
>	greater than

\geq greater than or equal to

° degrees

ΔG change of grade